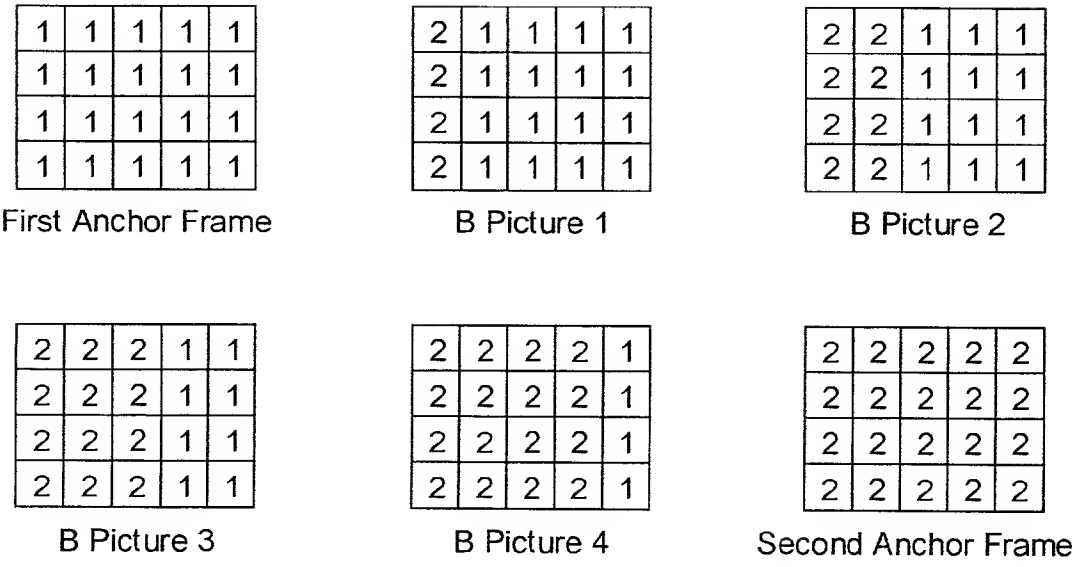
1 1 1 1 1
1 1 1 1 1
1 1 1 1 1
1 1 1 1 1
First Anchor Frame
2 1 1 1 1
2 1 1 1 1
2 1 1 1 1
2 1 1 1 1
B Picture 1
2 2 1 1 1
2 2 1 1 1
2 2 1 1 1
2 2 1 1 1
B Picture 2
2 2 2 1 1
2 2 2 1 1
2 2 2 1 1
2 2 2 1 1
B Picture 3
2 2 2 2 1
2 2 2 2 1
2 2 2 2 1
2 2 2 2 1
B Picture 4
2 2 2 2 2
2 2 2 2 2
2 2 2 2 2
2 2 2 2 2
Second Anchor Frame

Figure 1

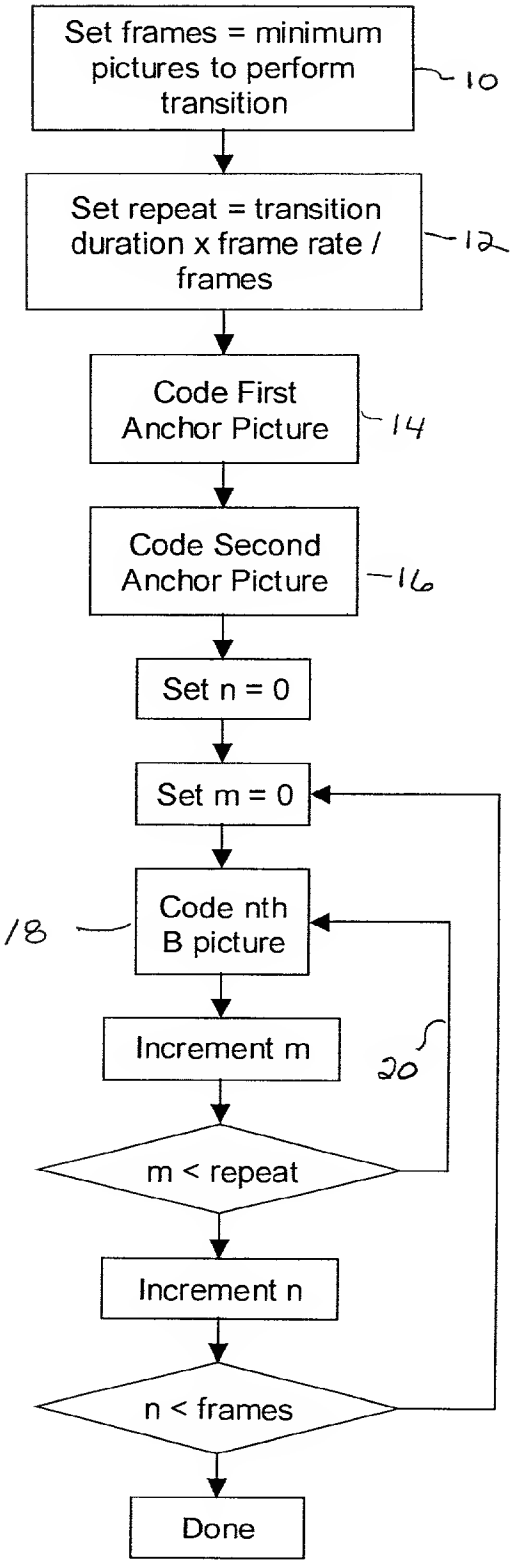
Set frames = minimum pictures to perform transition
10
Set repeat = transition duration x frame rate / frames
12
Code First Anchor Picture
14
Code Second Anchor Picture
16
Set n = 0
Set m = 0
18
Code nth B picture
Increment m
20
m < repeat
Increment n
n < frames
Done

Figure 2

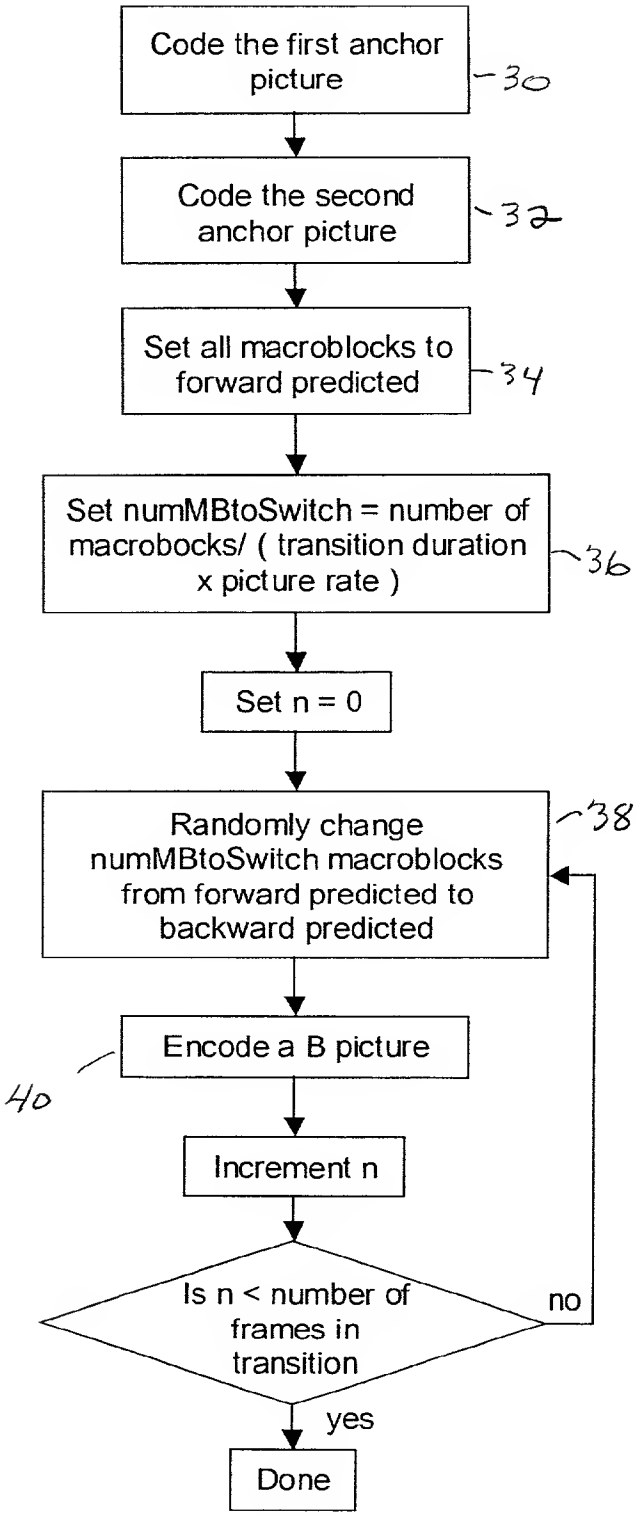
Code the first anchor picture
30
Code the second anchor picture
32
Set all macroblocks to forward predicted
34
Set numMBtoSwitch = number of macrobocks/ (transition duration x picture rate)
36
Set n = 0
Randomly change numMBtoSwitch macroblocks from forward predicted to backward predicted
38
Encode a B picture
40
Increment n
Is n < number of frames in transition
no
yes
Done

Figure 3

0000 0000 0000 0000 0000 0001 0000 0000	0000 0000 01	01 1
Picture start code	Temporal Reference	Picture coding type

000 0101 1101 1101 1	1	00 1	1	00 1	0
Vbv delay	Full pel fwd	Fwd fcode	Full pel bkwrd	Bkwd fcode	Extra bit

00	0000 0000 0000 0000 0000 0001 0000 0001	0000 1	0
pad	Slice start code	Quantizer scale	Extra bit slice

1	0 10	1	1
MBA increment	MB type	Bkwd horizontal fcode	Bkwd vertical fcode
1	001 0	1	1
MBA increment	MB type	Fwd horizontal fcode	Fwd vertical fcode
0 011	0 10	1	1
MBA increment	MB type	Bkwd horizontal fcode	Bkwd vertical fcode
1	001 0	1	1
MBA increment	MB type	Fwd horizontal fcode	Fwd vertical fcode
0 011	0 10	1	1
MBA increment	MB type	Bkwd horizontal fcode	Bkwd vertical fcode
1	001 0	1	1
MBA increment	MB type	Fwd horizontal fcode	Fwd vertical fcode
0 011	0 10	1	1
MBA increment	MB type	Bkwd horizontal fcode	Bkwd vertical fcode
1	001 0	1	1
MBA increment	MB type	Fwd horizontal fcode	Fwd vertical fcode
0 10	00 10	1	1
MBA increment	MB type	Fwd horizontal fcode	Fwd vertical fcode

Figure 4

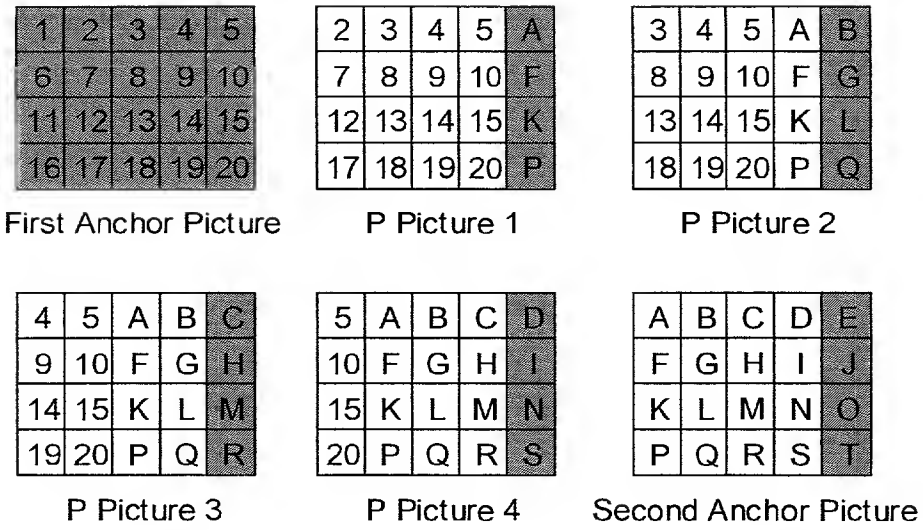
1 2 3 4 5
6 7 8 9 10
11 12 13 14 15
16 17 18 19 20
First Anchor Picture
2 3 4 5 A
7 8 9 10 F
12 13 14 15 K
17 18 19 20 P
P Picture 1
3 4 5 A B
8 9 10 F G
13 14 15 K L
18 19 20 P Q
P Picture 2
4 5 A B C
9 10 F G H
14 15 K L M
19 20 P Q R
P Picture 3
5 A B C D
10 F G H I
15 K L M N
20 P Q R S
P Picture 4
A B C D E
F G H I J
K L M N O
P Q R S T
Second Anchor Picture

Figure 5

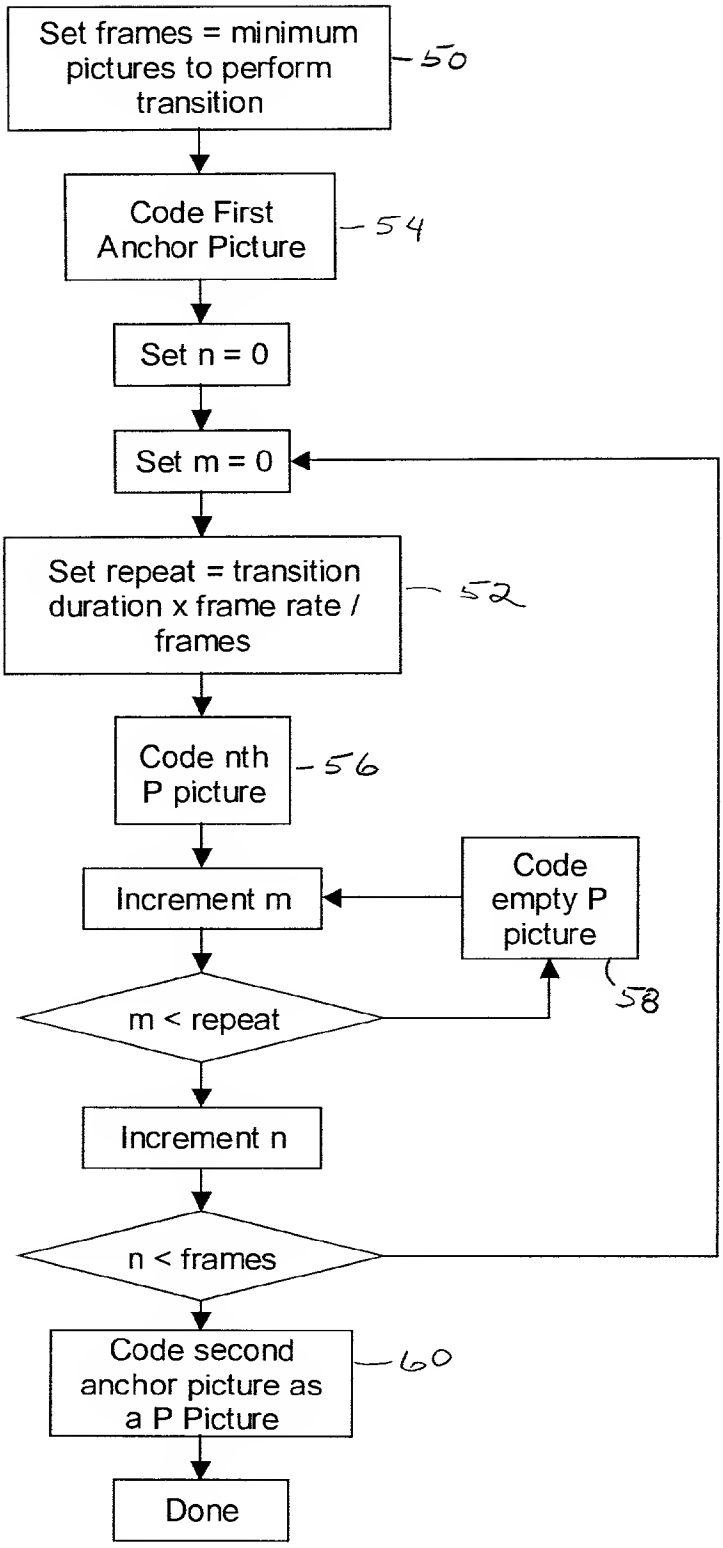
Set frames = minimum pictures to perform transition
50
Code First Anchor Picture
54
Set n = 0
Set m = 0
Set repeat = transition duration x frame rate / frames
52
Code nth P picture
56
Increment m
Code empty P picture
58
m < repeat
Increment n
n < frames
Code second anchor picture as a P Picture
60
Done

Figure 6

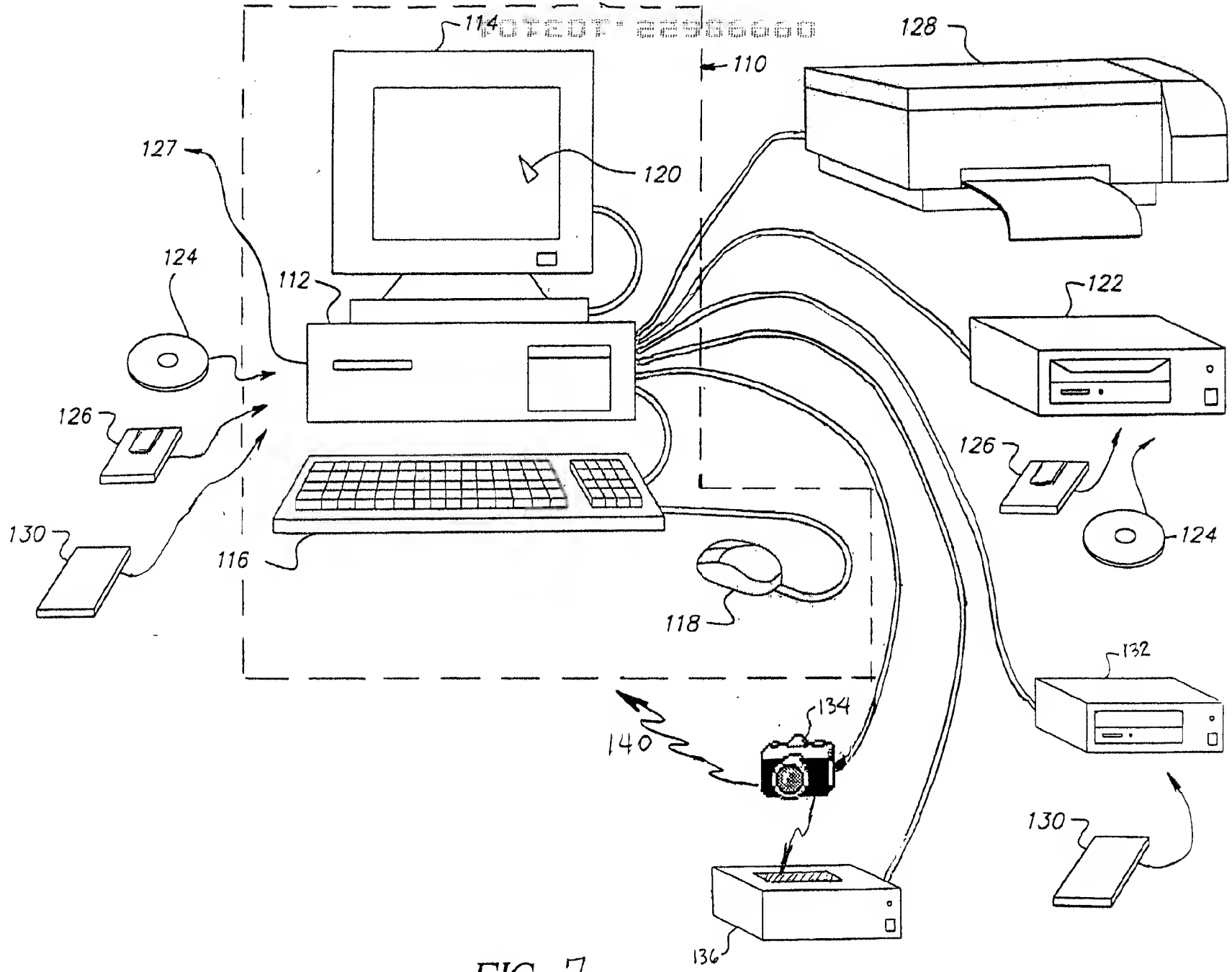
114
110
128
127
120
124
112
122
126
126
124
130
116
118
132
134
140
130
136

FIG. 7